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Application No.: 10/764,196

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

3. (Previously Presented) A base station for providing wireless communication of digital signals over a plurality of digital communication paths, the digital signals being communicated using at least one radio frequency channel via Code Division Multiple Access (CDMA) modulated radio signals, the base station comprising:

 a wireless transceiver for establishing a communication session over a first digital communication path; and

 a bandwidth management module connected to said wireless transceiver for allocating at least one code channel within the at least one radio frequency channel for exchanging digital signals over the first digital communication path during the communication session, the at least one code channel including at least one traffic portion that is established for a predetermined time and at least one control portion that is continuously available;

 said bandwidth management module reallocating the at least one traffic portion from the first digital communication path to a second digital communication path if an extension of time is not requested from the base station over the first digital communication path for the at least one traffic portion, or if the base station no longer has digital signals to transmit over the first digital communication path via the at least one traffic portion, but with the at least one reallocated traffic portion appearing as though it is still continuously available to the first digital communication path.

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4. (Previously Presented) A base station according to Claim 3 wherein the at least one code channel comprises a single code channel; and wherein the at least one traffic portion and the at least one control portion are multiplexed on the single code channel.

5. (Previously Presented) A base station according to Claim 3 wherein the at least one code channel comprises a plurality of code channels; and wherein the at least one traffic portion and the at least one control portion are on separate code channels.

6. (Previously Presented) A base station according to Claim 3 wherein said bandwidth management module reallocates the at least one traffic portion from the second digital communication path to the first digital communication path if a request for transmitting digital signals is received via the at least one control portion over the first digital communication path.

7. (Previously Presented) A base station according to Claim 3 wherein said bandwidth management module reallocates the at least one traffic portion from the second digital communication path back to the first digital communication path if the base station no longer has a need to transmit digital signals over the second digital communication path.

8. (Previously Presented) A base station according to Claim 3 wherein the digital signals comprise at least one of voice and data signals.

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**9. (Previously Presented) A base station according to Claim 3
wherein the wireless communication of digital signals is provided with a first
subscriber unit over the first digital communication path, and with a second
subscriber unit over the second digital communication path.**

**10. (Previously Presented) A base station according to Claim 9
wherein the at least one radio frequency channel comprises a first radio frequency
channel for establishing a forward code channel between said wireless transceiver
and the first subscriber unit, and a second radio frequency channel for establishing
a reverse code channel between the first subscriber unit and said wireless
transceiver.**

**11. (Previously Presented) A base station according to Claim 10
wherein said bandwidth management module assigns both the forward and reverse
code channels.**

**12. (Previously Presented) A base station according to Claim 10
wherein the forward and reverse code channels are multiplexed on a single radio
frequency channel.**

**13. (Previously Presented) A base station according to Claim 10
wherein the forward and reverse code channels are on different radio frequency
channels.**

**14. (Previously Presented) A base station according to Claim 9
wherein said wireless transceiver also establishes a communication session with a**

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data network so that the first subscriber unit and the data network exchange digital signals over the first digital communication path, and when the first subscriber unit does not request an extension of time for the at least one traffic portion, or if the data network no longer has digital data to transmit to the first subscriber unit, or if the base station no longer has digital data to transmit to the first subscriber unit or the data network, then said bandwidth management module reallocates the at least one traffic portion from the data network, but with the at least one reallocated traffic portion appearing as though it is still continuously available to the data network over the first digital communication path.

15. (Previously Presented) A subscriber unit for providing wireless communication of digital signals between terminal equipment connected therewith and a first digital communication path, the digital signals being communicated using at least one radio frequency channel via Code Division Multiple Access (CDMA) modulated radio signals, the subscriber unit comprising:

a wireless transceiver for establishing a communication session over the first digital communication path;

a bandwidth management module connected to said wireless transceiver for receiving over the first digital communication path at least one allocated code channel within the at least one radio frequency channel to exchange digital signals during the communication session, the at least one allocated code channel including at least one traffic portion that is established for a predetermined time and at least one control portion that is continuously available;

if said bandwidth management module does not request an extension of time over the first digital communication path for the at least one traffic portion, or if there is no longer a need to transmit digital signals to the subscriber unit over

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the first digital communication path, then the at least one traffic portion is reallocated to a second digital communication path associated with a second subscriber unit; and

a spoofing module connected to said bandwidth management module so that the reallocated traffic portion appears as though it is still continuously available to said wireless transceiver over the first digital communication path.

16. (Previously Presented) A subscriber unit according to Claim 15 wherein the at least one code channel comprises a single code channel; and wherein the at least one traffic portion and the at least one control portion are multiplexed on the single code channel.

17. (Previously Presented) A subscriber unit according to Claim 15 wherein the at least one code channel comprises a plurality of code channels; and wherein the at least one traffic portion and the at least one control portion are on separate code channels.

18. (Previously Presented) A subscriber unit according to Claim 15 wherein the at least one traffic portion is reallocated from the second subscriber unit back to the subscriber unit if said bandwidth management module requests, via the at least one control portion, a need to transmit digital signals.

19. (Previously Presented) A subscriber unit according to Claim 15 wherein the digital signals comprise at least one of voice and data signals.

20. (Previously Presented) A subscriber unit according to Claim 15

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wherein reallocation of the at least one traffic portion from the first digital communication path to the second digital communication path is performed by a base station.

21. (Previously Presented) A subscriber unit according to Claim 20 wherein the at least one radio frequency channel comprises a first radio frequency channel for establishing a forward code channel between the base station and said wireless transceiver, and a second radio frequency channel for establishing a reverse code channel between said wireless transceiver and the base station.

22. (Previously Presented) A subscriber unit according to Claim 21 wherein the forward and reverse code channels are multiplexed on a single radio frequency channel.

23. (Previously Presented) A subscriber unit according to Claim 21 wherein the forward and reverse code channels are on different radio frequency channels.

24. (Previously Presented) A digital communication system comprising:
a first subscriber unit at a first site for providing wireless communication of digital signals;
a second subscriber unit at a second site for providing wireless communication of digital signals; and
a base station for establishing a communication session with said first subscriber unit over a first digital communications path, the digital signals being

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communicated using at least one radio frequency channel via Code Division Multiple Access (CDMA) modulated radio signals;

 said base station allocating at least one code channel within the at least one radio frequency channel for said first unit to exchange digital signals during the communication session, the at least one code channel including at least one traffic portion that is established for a predetermined time and at least one control portion that is continuously available;

 said base station reallocating the at least one traffic portion to said second subscriber unit for establishing a second digital communications path therewith if said first subscriber unit does not request an extension of time from said base station, or if the base station no longer has digital signals to transmit to said first subscriber unit via the at least one traffic portion, but with the at least one reallocated traffic portion appearing as though it is still continuously available to said first subscriber unit over the first digital communication path.

25. (Previously Presented) A digital communication system according to Claim 24 wherein the at least one control portion is shared by said first and second subscriber units.

26. (Previously Presented) A digital communication system according to Claim 24 wherein the at least one code channel comprises a single code channel; and wherein the at least one traffic portion and the at least one control portion are multiplexed on the single code channel.

27. (Previously Presented) A digital communication system according to Claim 24 wherein the at least one code channel comprises a plurality of

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code channels; and wherein the at least one traffic portion and the at least one control portion are on separate code channels.

28. (Previously Presented) A digital communication system according to Claim 24 wherein said base station reallocates from the second subscriber unit the at least one traffic portion back to said first subscriber unit if said first subscriber unit request, via the at least one control portion, a need to transmit digital signals.

29. (Previously Presented) A digital communication system according to Claim 24 wherein said base station reallocates, via the at least one control portion, from said second subscriber unit the at least one traffic portion back to said first subscriber unit if said base station needs to transmit digital signals to said second subscriber unit.

30. (Previously Presented) A digital communication system according to Claim 24 wherein the digital signals comprise at least one of voice and data signals.

31. (Previously Presented) A digital communication system according to Claim 24 wherein the at least one radio frequency channel comprises a first radio frequency channel for establishing forward code channels between base station and said first and second subscriber units, and a second radio frequency channel for establishing reverse code channels between said first and second subscriber units and said base station.

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32. (Previously Presented) A digital communication system according to Claim 31 wherein said base station assigns both the forward and reverse code channels.

33. (Previously Presented) A digital communication system according to Claim 31 wherein the forward and reverse code channels are multiplexed on a single radio frequency channel.

34. (Previously Presented) A digital communication system according to Claim 31 wherein the forward and reverse code channels are on different radio frequency channels.

35. (Previously Presented) A digital communication system according to Claim 24 further comprising a data network; and wherein said base station establishes a communication session between said first wireless transceiver and said data network over a third digital communications path, and when said first subscriber unit does not request an extension of time for the at least one traffic portion, or if said data network no longer has digital data to transmit to said first subscriber unit, or if the base station no longer has digital data to transmit to the first subscriber unit or the data network, then said base station reallocates the at least one traffic portion from the data network, but with the at least one reallocated traffic portion appearing as though it is still continuously available to said data network over the third digital communication path.

36. (New) A method for use in a code division multiple access

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(CDMA) user device, the method comprising:

establishing a packet data communication session with a network in accordance with a protocol architecture, the protocol architecture having a plurality of protocol layers including a physical layer;

simultaneously using a plurality of reverse traffic channels associated with the packet data communication session to transmit packet data;

wherein each of the reverse traffic channels is associated with a CDMA code and at least three of the reverse traffic channels can have different rates; and

wherein a state of at least one protocol layer above the physical layer is maintained during the packet data communication session after the plurality of reverse traffic channels have been released.

37. (New) The method of claim 36 further comprising communicating a need for a particular user data rate to a base station in the network.

38. (New) The method of claim 36 further comprising simultaneously transmitting control, voice and data information to a base station in the network.

39. (New) The method of claim 36 further comprising simultaneously transmitting control, voice and data information to a base station in the network on separate reverse traffic channels.

40. (New) The method of claim 36 further comprising multiplexing user information over the plurality of reverse traffic channels.

41. (New) The method of claim 40 wherein the user information comprises

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voice and data.

42. (New) The method of claim 36 wherein the user device is a portable device comprising an integrated unit having a modem, a CDMA transceiver and a controller.

43. (New) The method of claim 42 wherein the portable device comprises a terminal equipment.

44. (New) The method of claim 36 wherein the user device includes an application layer.

45. (New) The method of claim 36 further comprising running an internet application.

46. (New) The method of claim 36 further comprising downloading a web page.

47. (New) The method of claim 36 further comprising:
transmitting CDMA signals on a selected transmission frequency out of a plurality of potential transmission frequencies; and
receiving CDMA signals on a selected reception frequency out of a plurality of potential reception frequencies.

48. (New) The method of claim 36 further comprising retrieving a stored class of service information.

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49. (New) The method of claim 36 further comprising retrieving a stored maximum data rate associated with the user device.

50. (New) The method of claim 36 further comprising assembling and buffering packet data for transmission over a traffic channel.

51. (New) The method of claim 36 further comprising requesting a supplemental reverse traffic channel based on an amount of packet data in a packet data queue.

52. (New) The method of claim 36 further comprising requesting a supplemental reverse traffic channel based on a priority of service of packet data in a packet data queue.

53. (New) The method of claim 36 further comprising requesting a supplemental reverse traffic channel based on a short term estimated data rate desired to transmit packet data.

54. (New) The method of claim 51 wherein the request for the supplemental reverse traffic channel is made independent of an existing forward channel allocation.

55. (New) A method for use in a code division multiple access (CDMA) user device, the method comprising:

establishing a packet data communication session with a network in

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accordance with a protocol architecture, the protocol architecture having a plurality of protocol layers including a physical layer;

simultaneously using a plurality of reverse traffic channels during the packet data communication session to transmit packet data, wherein each of the reverse traffic channels is associated with a CDMA code and at least three of the plurality of reverse traffic channels have different data rates; and

maintaining a state of at least one protocol layer other than the physical layer during the packet data communication session after the plurality of reverse traffic channels have been released.

56. (New) The method of claim 55 further comprising communicating a requested data rate for the packet data communication session to a base station in the network.

57. (New) The method of claim 55 further comprising simultaneously transmitting control, voice and data information to a base station in the network.

58. (New) The method of claim 55 further comprising simultaneously transmitting control, voice and data information to a base station in the network on separate ones of the plurality of reverse traffic channels.

59. (New) The method of claim 55 further comprising multiplexing user information over the plurality of reverse traffic channels.

60. (New) The method of claim 59, wherein the user information comprises voice and data.

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61. (New) The method of claim 55 wherein the user device is a portable device comprising an integrated unit having a modem, a CDMA transceiver and a controller.

62. (New) The method of claim 61 wherein the portable device comprises a terminal equipment.

63. (New) The method of claim 55 wherein the user device includes an application layer.

64. (New) The method of claim 55 further comprising running an internet application.

65. (New) The method of claim 55 further comprising downloading a web page.

66. (New) The method of claim 55 further comprising:
transmitting CDMA signals on a selected transmission frequency out of a plurality of potential transmission frequencies; and
receiving CDMA signals on a selected reception frequency out of a plurality of potential reception frequencies.

67. (New) The method of claim 55 further comprising retrieving a stored class of service information.

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68. (New) The method of claim 55 further comprising retrieving a stored maximum data rate associated with the user device.

69. (New) The method of claim 55 further comprising assembling and buffering packet data for transmission over a traffic channel.

70. (New) The method of claim 55 further comprising requesting a supplemental reverse traffic channel based on an amount of packet data in a packet data queue.

71. (New) The method of claim 55 further comprising requesting a supplemental reverse traffic channel based on a priority of service of packet data in a packet data queue.

72. (New) The method of claim 55 further comprising requesting a supplemental reverse traffic channel based on a short term estimated data rate desired to transmit packet data.

73. (New) The method of claim 70 wherein the request for the supplemental reverse traffic channel is made independent of an existing forward channel allocation.

74. (New) A method for use in a code division multiple access (CDMA) user device, the method comprising:

simultaneously transmitting packet data over a plurality of reverse traffic channels associated with a packet data communication session, wherein each

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of the reverse traffic channels is associated with a CDMA code and at least three of the plurality of reverse traffic channels can have different data rates; and

maintaining a status of at least one layer of the packet data communication session above a physical layer of the packet data communication session upon release of the plurality of reverse traffic channels.

75. (New) The method of claim 74 further comprising monitoring a data buffer to detect a rate at which the buffer is filled.

76. (New) The method of claim 74 further comprising communicating a requested data rate for the packet data communication session to a base station in the network.

77. (New) The method of claim 74 further comprising simultaneously transmitting control, voice and data information to a base station in the network.

78. (New) The method of claim 74 further comprising simultaneously transmitting control, voice and data information to a base station in the network on separate ones of the plurality of reverse traffic channels.

79. (New) The method of claim 74 further comprising multiplexing user information over the plurality of reverse traffic channels.

80. (New) The method of claim 79 wherein the user information comprises voice and data.

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81. (New) The method of claim 74 wherein the user device is a portable device comprising an integrated unit having a modem, a CDMA transceiver and a controller.

82. (New) The method of claim 81 wherein the portable device comprises a terminal equipment.

83. (New) The method of claim 74 wherein the user device includes an application layer.

84. (New) The method of claim 74 further comprising running an internet application.

85. (New) The method of claim 74 further comprising downloading a web page.

86. (New) The method of claim 74 further comprising:
transmitting CDMA signals on a selected transmission frequency out of a plurality of potential transmission frequencies; and
receiving CDMA signals on a selected reception frequency out of a plurality of potential reception frequencies.

87. (New) The method of claim 74 further comprising retrieving a stored class of service information.

88. (New) The method of claim 74 further comprising retrieving a stored

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maximum data rate associated with the user device.

89. (New) The method of claim 74 further comprising assembling and buffering packet data for transmission over a traffic channel.

90. (New) The method of claim 74 further comprising requesting a supplemental reverse traffic channel based on an amount of packet data in a packet data queue.

91. (New) The method of claim 74 further comprising requesting a supplemental reverse traffic channel based on a priority of service of packet data in a packet data queue.

92. (New) The method of claim 74 further comprising requesting a supplemental reverse traffic channel based on a short term estimated data rate desired to transmit packet data.

93. (New) The method of claim 90 wherein the request for the supplemental reverse traffic channel is made independent of an existing forward channel allocation.

94. (New) A method for use in a wireless code division multiple access (CDMA) user device, the method comprising:

transmitting packet data simultaneously over a plurality of reverse traffic channels and receiving data over at least one forward traffic channel during a communication session between the user device and a network;

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maintaining the communication session when all of the traffic channels have been released;

wherein each of the reverse traffic channels and the forward traffic channel is associated with a CDMA code; and

wherein at least three of the reverse traffic channels can have different data rates.

95. (New) The method of claim 94 further comprising maintaining the communication session without having to re-initialize an upper layer protocol associated with the communication session when all of the traffic channels have been released.

96. (New) The method of claim 94 wherein the user device is associated with a protocol architecture, the protocol architecture having at least a layer 1 and a layer 2, and wherein the upper layer protocol is a protocol associated with a protocol architecture layer above the layer 2.

97. (New) The method of claim 95 wherein the upper layer protocol is a layer 3 protocol.

98. (New) The method of claim 95 wherein the upper layer protocol is a network layer protocol.

99. (New) The method of claim 95 wherein the upper layer protocol is an ISDN or other wireline digital protocol.

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100. (New) The method of claim 94 wherein the user device is associated with a protocol architecture, the protocol architecture having at least a layer 1 and a layer 2, and wherein the one or more upper layer protocols are protocols associated with a protocol architecture layer or layers above the layer 2.

101. (New) The method of claim 100 wherein the one or more upper layer protocols are layer 3 protocols.

102. (New) The method of claim 100 wherein the one or more upper layer protocols are ISDN or other wireline digital protocols.

103. (New) The method of claim 94 wherein the communication session includes a network layer communication session.

104. (New) The method of claim 94 wherein the communication session includes a layer 3 communication session.

105. (New) The method of claim 94 wherein the wireless CDMA user device is a portable wireless CDMA user device.

106. (New) The method of claim 94 further comprising releasing the traffic channels upon expiration of a first predetermined period of time of packet data inactivity between the user device and a base station in the network over the reverse traffic channels.

107. (New) The method of claim 94 further comprising requesting

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assignment of a supplemental reverse traffic channel by a base station in the network during the communication session, the supplemental reverse traffic channel being supplemental to a previously assigned reverse traffic channel.

108. (New) The method of claim 106 further comprising:
requesting assignment of a supplemental reverse traffic channel during the communication session, the supplemental reverse traffic channel being supplemental to a previously assigned reverse traffic channel; and
wherein, once the supplemental reverse traffic channel is assigned, releasing it upon expiration of a second predetermined period of time.

109. (New) The method of claim 108 wherein the second predetermined period of time is determined by the user device.

110. (New) The method of claim 108 further comprising extending the second predetermined period of time when packet data in a buffer of the user device exceeds a predetermined threshold.

111. (New) The method of claim 94 wherein the user device is a portable device comprising an integrated unit having a modem, a CDMA transceiver and a controller.

112. (New) The method of claim 111 wherein the portable device comprises a terminal equipment.

113. (New) The method of claim 94 wherein the user device includes an

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application layer.

114. (New) The method of claim 94 further comprising running an internet application.

115. (New) The method of claim 94 further comprising downloading a web page.

116. (New) The method of claim 94 further comprising:
transmitting CDMA signals on a selected transmission frequency out of a plurality of potential transmission frequencies; and
receiving CDMA signals on a selected reception frequency out of a plurality of potential reception frequencies.

117. (New) The method of claim 94 further comprising retrieving a stored class of service information.

118. (New) The method of claim 94 further comprising retrieving a stored maximum data rate associated with the user device.

119. (New) The method of claim 94 further comprising assembling and buffering packet data for transmission over a traffic channel.

120. (New) The method of claim 94 further comprising monitoring a data buffer to detect a rate at which the buffer is filled.

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121. (New) The method of claim 94 further comprising:

transmitting a request for a supplemental reverse traffic channel, the supplemental reverse traffic channel being supplemental to a previously assigned reverse traffic channel, to a base station in the network over a previously assigned channel, the supplemental reverse traffic channel request indicating characteristics of the user device's supplemental reverse packet data traffic needs; and

receiving supplemental reverse traffic channel assignment information from the base station in response to the request and transmitting packet data from the user device to the base station over the previously assigned reverse traffic channel and the supplemental reverse traffic channel in accordance with the received supplemental reverse traffic channel assignment information.

122. (New) The method of claim 121 wherein the previously established channel is a reverse control channel.

123. (New) The method of claim 121 wherein the previously assigned channel is a reverse traffic channel.

124. (New) The method of claim 121 wherein the previously assigned channel is the previously assigned reverse traffic channel.

125. (New) The method of claim 121 wherein the characteristics include a need for a particular user data rate.

126. (New) The method of claim 121 further comprising repeating the supplemental reverse traffic channel request if the supplemental reverse traffic

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channel assignment information is not received by the user device within a predetermined time.

127. (New) The method of claim 121 further comprising maintaining the supplemental reverse traffic channel so long as it is being utilized by the user device.

128. (New) The method of claim 121 wherein the characteristics further include a duration providing an indication of how long the user data rate need requires the particular data rate.

129. (New) The method of claim 121 wherein the characteristics include a duration for which the supplemental reverse traffic channel is required by the user device.

130. (New) The method of claim 121 wherein the supplemental reverse traffic channel is maintained for the duration.

131. (New) The method of claim 121 wherein the supplemental reverse traffic channel does not carry signaling or control traffic.

132. (New) The method of claim 94 further comprising using different traffic channels to support simultaneous voice and packet data calls.

133. (New) The method of claim 94 further comprising maintaining the communication session by maintaining a logical session connection.

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134. (New) The method of claim 133 wherein the logical session connection is at a network layer protocol.

135. (New) The method of claim 121 further comprising requesting the supplemental reverse traffic channel based on an amount of packet data in a packet data queue.

136. (New) The method of claim 121 further comprising requesting the supplemental reverse traffic channel based on a priority of service of packet data in a packet data queue.

137. (New) The method of claim 121 further comprising requesting the supplemental reverse traffic channel based on a short term estimated data rate desired to transmit the packet data.

138. (New) The method of claim 121 wherein the requesting of the supplemental reverse traffic channel is independent of an existing forward channel allocation.